THE STUDY OF CHEMISTRY

AT THE

UNIVERSITY OF ILLINOIS

URBANA, ILLINOIS

1907

FRONT VIEW OF CHEMICAL LABORATORY

The purpose of this booklet is to furnish such general information concerning the work of the Department of Chemistry of the University of Illinois, that any one, contemplating study in this field of science, may know the equipment and advantages which are at the disposal of the student of the State University.

CHEMISTRY LECTURE ROOM

Aims of the Department.

The Department of Chemistry offers instruction in all branches of this science and to students of three general classes. First, to those who wish to fit themselves for work as technical chemists in the many applications of chemistry in the arts and manufactures, such as public analysts, assayers, mining experts, food analysts, agricultural chemists and experiment station workers, sanitary water experts, electro and manufacturing chemists. Second, to those who wish to follow the vocation of teaching, or that of research worker in pure science. Third, to those who wish the general culture and mental training which this subject affords, or who may desire the knowledge necessary for pursuing other branches of science such as Medicine, Biology, etc.

To suit these various requirements fifty-four courses are offered in Chemistry. These, taken in combination with various other non-technical courses lead to the B. S., or B. A. degree at the end of four years of study. One who has applied himself industriously throughout his college course is usually well qualified to fill acceptably one of the several positions, as teacher or chemist, which are often available to students of this Institution at the time of graduation. In recent years this demand for competent chemists from this laboratory has been much greater than the supply.

The total registration in these courses in Chemistry this year has been 1355. This num-

ber includes the registration of many students who have taken several courses each. The total number of different persons studying chemistry this year has been 599.

The University recognizes the fact that success in any science demands a broad liberal training, including mathematics, language, literature and other subjects. It is for this reason that all candidates for the Bachelor's degree in Chemistry are required to devote over one half of their total time in college to these, and cognate subjects.

In order to carry out this work in Chemistry in the highest order of efficiency, an adequate equipment is necessary, and available.

The faculty in Chemistry is composed of twenty-five members whose entire time is devoted to teaching and research work in this subject.

Faculty.

*WILLIAM A. NOYES, Ph. D., Head of the Department of Chemistry, Professor of Chemistry, and Director of the Chemical Laboratory. A. B., B. S., Iowa Coll., 1879; A. M. same, 1882; Ph. D., Johns Hopkins, 1882; Asst. Chem. Grinnell, 1879-80; Instructor Chem. Univ. Minn., 1882-3; Prof. Chem. Univ. Tenn., 1883-86; same Rose Polytech. 1886-1903; Chief Chemist Bur. Standards, 1903-07; Edit. Jr. Am. Chem. Soc., 1902-; Sec'y same, 1903-07; Head Chem. Dept., Prof. Chem. and Dir. Chem. Lab'y Univ. Ill. 1907-; Member Am. Chem. Soc.; Soc. Chem. Indust.; Deutsche Chem. Gesell.; Fellow Am. Ass. Adv. Sci.

*Assumes office Sept 1, 1907.

SAMUEL W. PARR, M. S., Professor of Applied Chemistry.

B. S. Univ. Ill., 1884; M. S. Cornell Univ., 1885; Prof. Nat. Sci. Ill. Coll., 1885-91; Prof. Anal. and Appl'd Chem., Univ. Ill., 1891-94; Prof. Appl'd Chem. and Head of Dept. of Appl'd Chem., 1894-1904; Director St. Water Sur., 1903-04; Prof. Appl'd Chem. and Instructional Head Dept. Chem., 1904-07; Chemist Univ. Ill. Eng. Ex. Sta., 1905-; Chemist on Coal Investigations, Ill. Geol. Sur., 1906-; Member Am. Chem. Soc.; Soc. Chem. Ind.; Am. Ass. Adv. Sci.; Sigma Xi.

*HARRY S. GRINDLEY, Sc. D., Professor of General Chemistry, Director of Laboratory.

B. S. Univ. Ill., 1888; Sc. D., Harvard, 1894; Instructor Chem., Univ. Ill., 1888-92; Asst. Harvard, 1892-93; Morgan Fellow, Harvard, 1893-94; Instructor Chem., Univ. Ill., 1894-95; Asst. Prof. same, 1895-99; Assoc. Prof. same, 1899-1904; Prof. and Dir. Chem. Lab'y, same, 1904-07; Member Am. Chem. Soc.; Chem. Soc., London; Deutsche Chem. Gesell.; Am. Breeders' Ass.; Am. Soc. Biol. Chemists; Fellow Am. Ass. Adv. Sci.; Sigma Xi.

EDWARD BARTOW, Ph. D., Professor of Sanitary Chemistry and Director State Water Survey.

A. B., Williams Coll. 1892; Ph. D., Gottingen, 1895; Asst. Chem. Williams, 1892-94; Instructor same, 1895-97; Assoc. Prof. Chem., Univ. Kan.,

*After Sept. 1st, Professor of Animal Chemistry and Chief of Laboratory of Physiological Chemistry in the Department of Animal Husbandry of the College of Agriculture, University of Illinois.

1897-1905; Prof. Chem., Kansas City Med. Coll., 1902-1905; Member Commission Investig. Coal Mine Explosion, Kansas, 1905; Assoc. Prof. San. Chem. and Director St. Water Sur., Univ. Ill., 1905-06; Prof. San. Chem. and Dir. St. Water Sur., 1906; Member Am. Chem. Soc.; Deutsche Chem. Gesell.; Am. Ass. Adv. Sci.; Sigma Xi; Phi Beta Kappa.

AZARIAH T. LINCOLN, Ph. D., Assistant Professor of Chemistry.

B. S., Univ. Wis., 1894; M. S., same, 1898; Ph. D., same, 1899; Private Research Asst. Phys. Chem., Cornell Univ., 1899-1900; Instructor Chem. Univ. Cincinnati, 1900-01; Instructor Chem. Univ. Ill., 1901-04; Asst. Prof. Chem., Univ. Ill., 1904-; Member Am. Chem. Soc.; Am. Electro-Chem. Soc.; Sigma Xi.

RICHARD S. CURTISS, Ph. D., Assistant Professor of Organic Chemistry.

Ph. B., Shef. Sci. Sch., Yale, 1888; Chem. Conn. Agr. Exp. Sta., 1888-90, and 1893: Ph.D., Univ. Würzburg, 1892; Univ. of Paris, 1892-93; Docent, and Instructor Org. Chem. Univ. Chicago, 1894-97; Prof. Chem., Hobart Coll., 1897-1901; Prof. Chem., Union Coll., 1901-04; Asst. Prof. Org. Chem., Univ. Ill., 1904-; Member, Deutsche Chem. Gesell.; Würzburger Chem. Gesell.; Am. Chem. Soc.; Sigma Xi; Fellow, Am. Ass. Adv. Sci.

WILLIS B. HOLMES, Ph. D., Associate in Quantitative Chemistry.

A. B. Harvard, 1896; A. M. same, 1897; Ph. D., John Hopkins, 1899; Assistant, Harvard, 1896-07; Instructor Mass. Inst. Tech., 1899-00;

Univ. Montana, 1900–05; Univ. of Chicago, 1905–07.

CLARENCE W. BALKE, Ph. D., Associate in General Chemistry.

A. B. Oberlin, 1902; Ph. D., Univ. Penn., 1905; Instructor, Oberlin, 1903; Acting Professor, Kenyon Coll., 1903–04; Fellow Univ. Penn., 1904–05.; Research Fellow, 1905–06; Instructor in Gen. Chem., Univ. Penn., 1906–07.

SAMUEL C. CLARK, B. S., Instructor in Chemistry.

B. S. Univ. Chicago, 1900; Teacher, Sci., High Sch. several years; Asst. Chem., Univ. Ill., 1902-05; Instructor, same, 1905—.

GEORGE McPHAIL SMITH, Ph. D., Instructor in Chemistry.

B. S., Vanderbilt Univ., 1900; Ph. D., Freiburg i/B, 1903; Instructor Analyt. Chem. Mich. Coll. Mines, 1903-04; Instructor Analyt. Chem. and Metallurgy, N. C. Agr. and Mech. Coll., 1904-05; Prof. Phys. and Chem., Peabody Coll. of Teachers, Summer School, 1905; Instructor Chem., Univ. Ill., 1905-; Member Am. Chem. Soc.; Soc. Chem. Indust.; Deutsche. Chem. Gesell.; Sigma Xi.

HELEN ISHAM, Ph. D., Instructor.

A. B., Cornell Univ., 1903; Ph. D., same, 1906; Teacher at Bernard College and student at Columbia University, 1903–04. Student at Cornell Univ., 1904–06; Laboratory assistant, Bureau of Standards, 1906-07; Member of Am. Chem. Soc.; Sigma Xi.

ALICE V. FLATHER, Assistant in Chemistry.

Teacher of Sci.. High Sch., Methuen, Mass., 1897-1902; Asst. in Chem., Univ. Ill. 1904—; Member Am. Chem. Soc.

GRANT TRAIN DAVIS, A. B., Assistant in Chemistry.

A. B. Univ. Mich., 1903; Instructor Gen. Chem., Univ. Me., 1903-06; Asst. Chem., Univ. Ill., 1906-; Member, Am. Chem. Soc.

HENRY ALBRIGHT MATTILL, A. B., Assistant in Chemistry.

A. B., Western Reserve Univ., 1906; A. M., same, 1907; Asst. Chem., Univ. Ill., 1906-; Member, Am. Chem. Soc., Phi Beta Kappa.

CLARENCE GEORGE DERICK, S. B., Lecture and Research Assistant.

S. B. Worcester Polytechnic Institute 1906. Research Assistant in Mass. Inst. Technology 1906-7.

JOSEPH E. DUNIPACE, A. M. Assistant.

A. B. Oberlin, 1905; A. M., Leland Stanford, 1906; Asst. in Chem., St. Coll., Pa., 1906-07.

THOMAS R. ERNEST, B. S., Graduate Assistant.

B. S. Univ. of Ill., 1907.

W. H. LEVERETT, B. S., Graduate Assistant.

B. S. Shurtleff Coll., 1904; M. S. same, 1905.

E. V. MANUEL, B. S., Graduate Assistant.

B. S. Univ. of Minn., 1907.

J. T. NUTTALL, B. S., Graduate Assistant.

B. S. Northwestern Univ., 1905.

J. S. ROGERS, A. B., Assistant.

A. B. Syracuse Univ., 1907.

C. R. MOULTON, B. S., Fellow.

B. S. Univ. of Ill., 1907.

A. W. HOMBERG, B. S., Fellow.

B. S. Univ. of Wis., 1906, Assistant Chemist, Rose Polytechnic Institute, 1906–07.

C. K. FRANCIS, Ph. B., and A. M., Fellow.

Ph. B. and A. M., Brown Univ., 1899; Assistant Chemist, Brown Univ., 1898–99; Assistant Chemist, Georgia School Tech., 1899–03; Prof. Chem. Converse College, 1903–07.

R. C. ROARK, A. B., Fellow.

A. B. Univ. of Cincinnati, 1906.

Special Lectures.

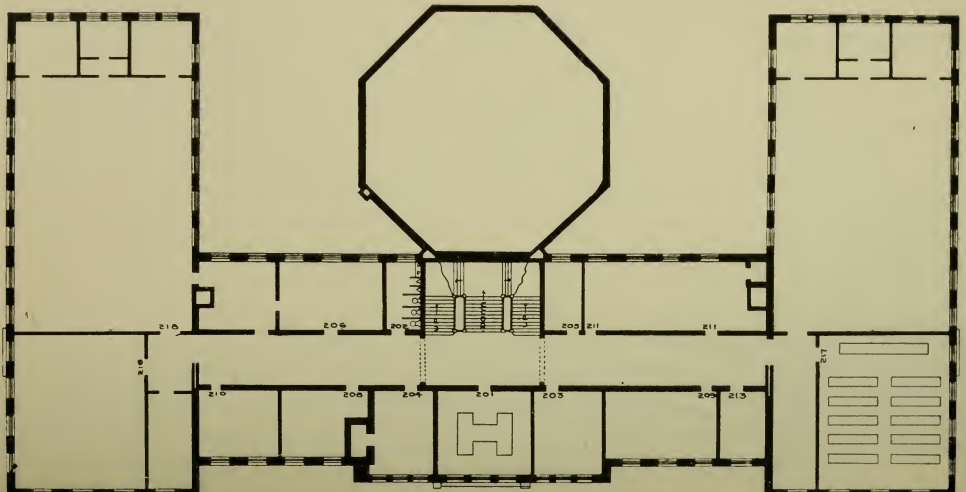
From time to time short courses of lectures are given on subjects of special interest to chemists, by investigators whose eminence and leadership in their field of research is universally recognized. By acquaintance and personal contact with such men, added interest and inspiration are afforded the students and faculty in their work.

Chemical Laboratory.

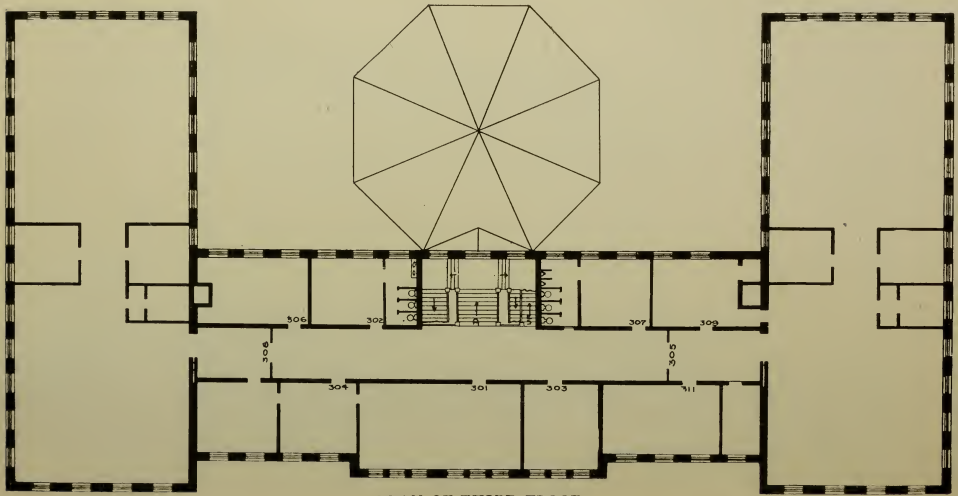
The chemical laboratory and its equipment are at a high standard of efficiency. The laboratory was erected in 1902 at a cost, inclusive of equipment, of $150,000. It is built of red brick, with Bedford stone trimmings. It has four stories and about 80,000 feet of floor space. The ground floor plan is on the form of the letter E; 230 feet front and 116 feet deep on the wings.

On the first floor at the center rear is a lecture amphitheatre with a seating capacity of 360. The central part of the building is occu-

PLAN OF FIRST FLOOR



PLAN OF SECOND FLOOR



PLAN OF THIRD FLOOR

THE CHEMICAL LIBRARY

pied by offices, museum, storerooms, lecture rooms, and smaller private research laboratories. The various laboratories of the State Water Survey occupy an entire wing on the main floor. Here are also the offices and laboratories of the State Geological Survey, as well as the laboratories of Applied Chemistry.

At each end on the second floor is a large laboratory accomodating ninety-six students each, and used by the departments of Analytical and of Organic Chemistry. Here are also found the private laboratories for research in Physical and in Organic Chemistry.

On the third floor are two laboratories of General Chemistry, accomodating 350 students. Storerooms and smaller laboratories for research in Nutrition, are on this floor also.

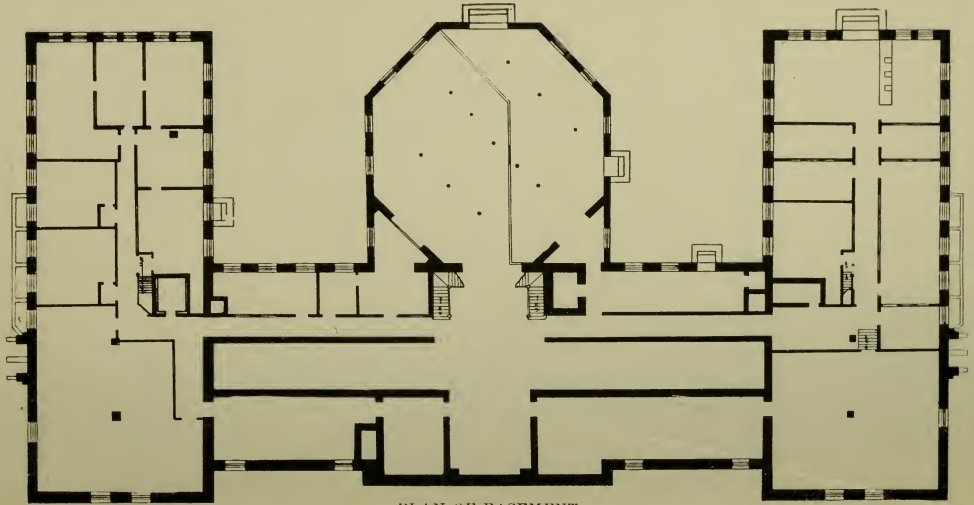
In the high, well lighted basement are found the Metallurgical and Assay Laboratories, as well as those used for coal investigations and for the chemical work of the Engineering Experiment Station.

The laboratories and store-rooms are supplied with necessary apparatus and materials.

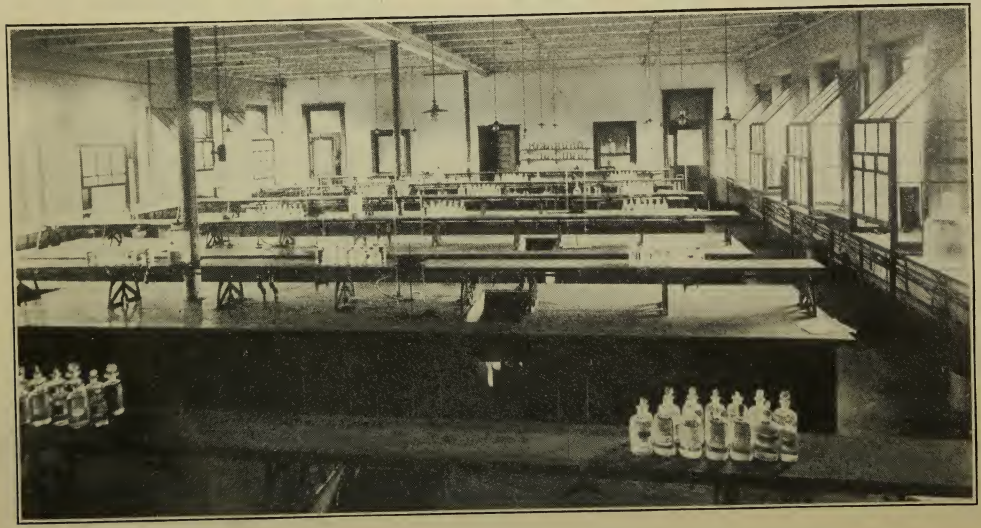
The atmosphere of all lecture rooms and laboratories is kept fresh and healthful by powerful fans, operated by dynamos in the basement, which force the outer air in (over steam coils in winter), and out, through the ventilator and hood flues which are placed in every room.

Libraries.

Within the Chemical Laboratory is a well



PLAN OF BASEMENT



LABORATORY OF ANALYTICAL CHEMISTRY

equipped departmental library, containing the necessary reference books, sets of journals, and the leading chemical periodicals of the world.

In an adjoining room is the Palmer Memorial Library, containing the private collection of chemical works and journals of the late Dr. Arthur W. Palmer, head of the department, and presented to the University by Mrs. Palmer as a memorial. To his persistent energy and foresight, and admirable devotion to its needs, the University owes much for the excellently planned laboratory herein described.

State Water Survey.

This Survey is a division of the Department of Chemistry of the University of Illinois, and special laboratories are equipped in the Chemical Laboratory for conducting the work.

Staff.

EDWARD BARTOW, Ph. D., Director.
THOMAS J. BURRILL, Ph. D., LL. D., Consulting Bacteriologist.
SAMUEL. W. PARR, M. S.. Consulting Chemist.
ARTHUR N. TALBOT, C. E., Consulting Engineer.
*CECIL K. CALVERT, Assistant Chemist.
LULU E. GARDINER, Stenographer.
OPAL LOCKWOOD, Assistant Stenographer.

The chemical survey of the waters of the state was begun in the latter part of September,

*Field Assistant, U. S. Geol. Sur.

1895. In June, 1897, the Legislature authorized the continuance of the work and directed the trustees of the University to establish a chemical and biological survey of the waters of the state. The purpose of the survey is to collect facts and data concerning the water supplies of the state; to make such chemical and biological examination and analyses, as shall serve to demonstrate their sanitary condition; to determine standards of purity of drinking waters for the various sections of the state, and to publish the results of these investigations. Analyses of water for citizens of the state are made on request.

Graduate Work.

Especial attention is being given to research work in this department, under the auspices of the Graduate School. Those who have won the Bachelor's degree and desire to specialize in any field of chemical research, may become candidates for the degree of Master of Science, or Doctor of Philosophy. These degrees are obtained after the completion of a definite amount of work and the presentation of an acceptable thesis, showing high attainments, and ability to carry out original investigations.

Research Work and Publications.

The following list of publications which have appeared in the past three years is here given. It covers the various fields of investigation pursued by members of the faculty, and which are

open to the qualified student desiring to learn the methods of research work in Chemistry.

William A. Noyes, Ph. D.:—"The Present Problems of Organic Chemistry." Chem. News, 90, 212 and 228 and in Addresses delivered at the Congress of Science and Arts at the Louisiana Purchase Exposition. Houghton Miflin & Co "The Decomposition of Nitroso Compounds." Am. Chem. Jr., 32, 285, withR. de M. Taveau. "The Preparation of Cyanaceticester." Jr. Am. Chem. Soc. 26, 1545. "Camphoric Acid: Derivatives of Trimethylparaconic Acid." Am. Chem. Jr. 32, 356. "Correction on Dimethyl and Trimethyladipinic Acid." Ber. d. d. Chem. Gesell. 38, 947; same, Jr. Am. Chem. Soc., 27, 237, with H. W. Doughty. "Derivatives of Trimethylparaconic Acid and of Camphoronic Acids." Jr. Am. Chem, Soc., 27, 1429, with H. W. Doughty. "Camphoric Acid: Some Derivatives of Aminolauronic Acid." Am. Chem. Jr., 35, 379, with R. de M. Taveau. Kurtzes Lehrbuch der organisches Chemie, translated by Dr. Wa. Ostwald. (In press)

S. W. Parr, M. S.:—"Some Notes on the Service Waters of a Railway System." Jr. Am. Chem. Soc. 28, 640. "Fuel Tests with Illinois Coals." L. P. Breckenridge, S. W. Parr, H. S. Dirks, Univ. of Ill. Bull. No. 22, Vol. 3, 1. "Composition and Character of Illinois Coals." (Chap. by A. Bement and L. P. Breckenridge.) Ill. St. Geol. Sur. Bull. No. 3, 27. "The Constituents of Coal with Reference to the Production of Heat." Eng. and Min. Jr., June, 1907. "The Available Hydrogen of Coal."

Jr. Am. Chem. Soc., 29, 582. "The Anthricizing of Illinois Coal." Chap. Year Book, 1907, St. Geol. Sur. "The Interpretation of Analytical Data for Boiler Waters." Chap. Rep. Ill. St. Water Sur., 1907. "Concerning Calorimeters." Power, June, 1907. "Classification of Coals." Jr. Am. Chem. Soc. 28, 1425. The Constants and Variables of the Low Calorimeter, Jr. Am. Chem. Soc. Oct. 1907.

H. S. Grindley, Sc. D.:—"Experiments on Losses in Cooking Meat." U. S. Dept. Agr., Exp. Sta., Washington, D. C., Bull. 14, with Timothy Mojonnier. "The Nitrogenous Constituents of Flesh." Jr. Am. Chem. Soc. 26, 1086. "On the Presence of Cotton Seed Oil in Lards from Hogs Fed upon Cotton Seed Meal." Jr. Am. Chem Soc., 27, 263., A. D. Emmett, A. M., and H. S. Grindley, Sc. D. "Improved Methods for the Analysis of Animal Substance." Jr. Am. Chem. Soc., 27, 6. "Studies on the Influence of Cooking upon the Nutritive Value of Meats." U. S. Dept. Agr. Exp. Sta., Washington, D. C., Bull. 162, with A. D. Emmett, A. M. "Experiments in General Chemistry." Pub. by author, Urbana, Ill.. (Pp. 70). "Qualitative Chemical Analysis." Pub. by author, Urbana, Ill. (Pp. 152). "A Study of the Phosphorus Contents of Flesh." Jr. Am. Chem. Soc., 28, 1, with A. D. Emmet, A. M. "Cold Storage of Poultry." Ice and Refrigeration, Chicago, 31, 162. "Elementary General Chemistry." Pub. by Dept. of Chem., Univ. Ill., 1906. Pp. XXXII + 150, with S. C. Clark, B. S. "Experiments in General Chemistry."

Pub. by Dept. of Chem. Univ. Ill. Pp. XXXII + 93 (1906). "Qualitative Chemical Analysis." Pub. by Dept. of Chem., Univ. Ill., Pp. XXX + 117, 1906, with S. C. Clark, B. S., and W. A. Redenbaugh, Ph. D. "The Chemistry of Flesh." (5th paper) "Methods for the Determination of Creatinine and Creatine in Meats and their Products." Jr. Biol. Chem., New York, 2, 309. Reprinted in full in The Chemical News. London, 95, 145, with H. S. Woods. "A Study of Methods for the Determination of the Various Forms of Phosphorus Compounds in Meats." Jr. Am. Chem. Soc. (In press). "Studies of the Effect of Different Methods of Cooking upon the Thoroughness and Ease of Digestion of Meat." U. S. Dept. of Agr., Office Exp. Sta. Bull. (In press) "A Precise Method for Roasting Beef." The Univ. Studies, Univ. Ill. With Elizabeth C. Sprague.

Edward Bartow, Ph. D.:—"The State Water Survey." 21st An. Rep. Ill. Soc. Eng. and Surveyors, 1906, p. 68. "Discussion of Water Softening." Proceedings of the Am. Water Works Ass., 1905, p. 135. "Chemical and Biological Survey of the Waters of Illinois." Rep. for year ending Aug. 31, 1906. Oct. 1906, pp. 30.

A. T. Lincoln, Ph. D.:—"The Ternary System, Benzene, Acetic Acid and Water." Jr. Phys. Chem. 8, 248. "Determination of Phosphates in Natural Waters." Jr. Am. Chem. Soc. 26, 975, with Perry Barker. "A New Burette Holder." Jr. Am. Chem. Soc. 27, 1442. "The Vapor Pressure of Aqueous Nitrate Solutions." Jr. Phys. Chem. 11, 318, with David Klein, A.M

"The Electrolytic Corrosion of Brasses." Jour. Phys. Chem., Trans. Am. El. Chem. Soc. (In press). With David Klein and Paul E. Howe.

Richard S. Curtiss, Ph. D.:—"A Convenient and Practical Method for Making the Ester of Mesoxalic Acid." Am. Chem. Jr. 33, 603. "Amine Derivatives of Mesoxalic Esters." Am. Chem. Jr. 35, 354. "Ethyl Oxomalonate and its Behavior Toward Ammonia." Science, 23, 337. "The Reaction of Nitrous Anhydride with Ethylmalonate." Am. Chem. Jr. 35, 477. "Methylmesoxalate and some of its Reactions." (In press). With P. T. Tarnoski.

George McP. Smith, Ph. D.:—"The Action of Sodium Amalgam on Solutions of Potassium Salts and of Potassium Amalgam on Solutions of Sodium Salts." Jr. Phys. Chem. 8, 208. "The Action of Barium Amalgam on Solutions of Sodium and Potassium Salts." Jr. Phys. Chem. 9, 13. "On the Reciprocal Replacement of the Metals in Aqueous Solutions." Jr. Am. Chem. Soc. 27, 540. "On the Constitution of Amalgams." Am. Chem. Jr. 36, 124. "The Electrolytic Preparation of Amalgams." Jr. Am. Chem. Soc. 29, 321, with James R. Withrow, Ph. D. "On Reversible Metallic Displacements in Aqueous Solutions." Am. Chem. Jr. 37, 506. "The Constitution of Ammonium Amalgam." Jr. Am. Chem. Soc. 29, June, 1907. "On Amalgams. The Hydrargiride of the Alkali and Alkali Earth Metals." Am. Chem. Jr. (In press).

Societies and Clubs.

The Chemical Laboratory of the University is the official place of meeting of the University of Illinois Section of the American Chemical Society.

This Section comprises all members of the Society residing within fifty miles of the University. Thirty members are now residing at the University. Regular monthly meetings are held, which are open to students and others interested. Papers are read and discussed, embodying chiefly the results of the researches done in this laboratory, which are then published in some one of the half dozen chemical journals of the country.

The regular monthly meetings of the Illinois chapter of Sigma Xi are held in one of the lecture rooms of the Chemical Laboratory. The purpose of this society is to encourage original investigations in Science, pure and applied. To this end regular monthly meetings are held at which scientific papers are read. Fraternal relations are promoted between its members, and also with those of other Chapters at the various scientific centers throughout the country. The privilege of membership is open as a high honor, to a limited number of students of each graduating class who have, during their college course, shown marked ability in research and who give special promise of future achievement. The membership of this Chapter at present is one hundred and sixty-six, eighty-five being active members.

The Chemical Club is an organization of the students of Chemistry. It aims to promote scholarly interest in chemical science, and good fellowship among the members. Meetings are held fortnightly, in their club room in the Chemical Laboratory, at which addresses are made on subjects of interest to chemists, by its members or invited guests from the faculty. The Club has eighty-three members.

The Phi Lambda Upsilon Fraternity is an honor organization of the junior and senior students and graduates who have shown special ability in chemical studies. Its chief purpose is to further an interest in chemistry and promote fraternal relations among its members. Its membership is now sixty.

Occupation of Graduates.

Railroad Laboratories	8
Packing Industry	3
Metallurgists or Metallurgical Chemists	11
Fuel Testing and Research	4
Superintending Chemists	19
Teachers of Chemistry in Colleges	9
Teachers of Chemistry in Secondary Schools	2
Analytical Chemists or Chemical Experts	32
Miscellaneous Manufacturers	4
Managers of Business Involving Chemistry	3
Students, or Engaged in Research	6
Pharmacists	7
Physicians	10
Missionaries	2
Agriculturalists	3
Business not Related to Chemistry	11

Not in Business	9
Deceased	6
Total	149

Fellowships.

The University has established a number of fellowships for the purpose of promoting advanced scholarship and research. These are open to graduates of this and similar institutions, and carry with them an annual stipend of from two hundred and fifty to five hundred dollars. Fellowships are good for one year, but appointments may be renewed to the same person.

Further information will be furnished on application to the Registrar or the Dean of the Graduate School.

Summer Session.

The University conducts a summer session of nine weeks duration, beginning on Monday following the June Commencement. This term is equivalent to one-fourth of the University year and credit is given on that basis.

The purpose of the summer session is to give to those who cannot attend during the regular college year, an opportunity to do advanced work. Leading instructors both from the University corps of teachers and outside of it, have charge of the courses, so that the character of the instruction offered is as high as that during the regular college year.

Most of these courses are intended for students who wish to pursue work for a Bach-

elor's or a Master's degree in the University, and are so arranged that students may specialize in a single subject, if it seems desirable, devoting their whole time to it. A few are for students who are preparing to enter the University, or who wish to make up deficiencies in work of a preparatory grade. Some courses, also, have been especially arranged for the purpose of aiding those who teach or who wish to prepare themselves to teach in high schools, academies, and other schools. Methods of teaching will be treated in nearly all of the courses.

A tuition fee of twelve dollars ($12) is required of all students in regular attendance at this session. This entitles one to admission to all regular courses and to all special lectures. An extra fee is charged in laboratory courses to cover cost of material used.

Examination in some of the courses may be had at the end of six weeks by those who find it impossible to remain to the end of the session.

The Registrar will mail, on application, a bulletin containing complete information concerning the Summer Session and its courses.

The University of Illinois.

The University comprises the following colleges and schools, part of them located in Urbana and part of them in Chicago. Those at Urbana are:

The Graduate School.

The Colleges of Liberal Arts, including the

College of Literature and Arts and the College of Science.

The College of Engineering.

The College of Agriculture.

The College of Law.

The School of Library Science.

The School of Music.

The School of Education.

The School of Railway Engineering and Administration.

In connection with the College of Agriculture, the Agricultural Experiment Station for Illinois is maintained at Urbana, partly by state and partly by federal appropriations.

The Engineering Experiment Station, established by the State Legislature in 1903, is at Urbana, in connection with the College of Engineering.

The offices of the State Laboratory of Natural History, State Entomologist, State Water Survey and State Geological Survey are located at Urbana.

The departments of the University in Chicago are:

The College of Medicine.

The School of Pharmacy.

The College of Dentistry.

The total enrollment for the current year is 4316.

The University is located between the adjacent cities of Champaign and Urbana, within the corporate limits of the latter.

For more detailed information concerning the

courses, requirements for admissions and other matters, address

W. L. PILLSBURY, *Registrar*,
Urbana, Illinois.

GAZETTE PRESS CHAMPAIGN, ILL.

GAZETTE PRESS UNION LABEL CHAMPAIGN, ILL.